ABSTRACT OF THE DISCLOSURE

[100] An approach is provided for decoding a low density parity check (LDPC) coded signal. Edge values associated with a structured parity check matrix used to generate the LDPC coded signal are retrieved from memory. The edge values specify the relationship of bit nodes and check nodes, and are stored within memory according to a predetermined scheme that permits concurrent retrieval of a set of the edge values. A decoded signal corresponding to the LDPC coded signal is output based on the retrieved edge values.